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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/518,507 | 12/20/2004 | Steven John Hard | 66307-330-7 | 8386 |

25269 7590 03/06/2006

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| EXAMINER |
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CORDRAY, DENNIS R

| ART UNIT | PAPER NUMBER |
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1731

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/518,507 | HARD, STEVEN JOHN | |
| | Examiner | Art Unit | |
| | Dennis Cordray | 1731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3 documents</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "fibrous substrate" in reference to the term "substrate" used earlier in the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 10, 14-15 and 17 recite the limitation "fibrous substrate" in Claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "each sheet" in reference to an earlier portion of the claim. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 12-13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 12-13, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

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Claims 14 and 15 recite the limitation "an aperture." It is not clear whether the aperture is the same aperture recited in Claim 1 or a different aperture (i.e.-a hole in the sheet through which a binding ring or hook can fit).

Claim 14 recites the limitation "in an identical location." The meaning of "identical location" is not clear. Does "identical location" indicate that the aperture is located such that, if one sheet were placed atop a second sheet, the apertures would exactly overlay one another, or does the phrase mean that the apertures on separate sheets are located identically with respect to another feature or mark on each page, which features may not precisely line up.

Claim 14 recites the limitation "a plurality of made from a fibrous substrate." It is not clear to what feature "a plurality of" refers. It will be assumed, for the purpose of this examination that the phrase refers to "a plurality of sheets."

Claims 2-9, 11 and 16 depend from Claim 1, thus inherit the indefiniteness of the parent claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitehead (2956331), Pitts (4830268) or Zheng (5910058).

Whitehead discloses a lawn chair (Fig 2) comprising a fibrous substrate (the fabric, reference # 11) having a metal elongate element partially embedded therein (the frame, reference # 15) and having a plurality of apertures along the edges, each of which exposes the elongate element, with a gap being formed between the elongate element and the perimeter of the aperture.

Pitts discloses an adjustable file folder (Fig 1) comprising a fibrous substrate (the fabric of the folder, reference # 12) having a metal elongate element partially embedded therein (the support frame, reference # 34) and having a plurality of apertures, each of which exposes the elongate element, with a gap being formed between the elongate element and the perimeter of the aperture.

Pitts discloses a portable play structure (Fig 1) comprising a fibrous substrate (the fabric of the net, reference # 23) having a metal elongate element partially embedded therein (the support frame for the net, reference # 22) and having a plurality of apertures, each of which exposes the elongate element, with a gap being formed between the elongate element and the perimeter of the aperture.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isherwood et al (WO 00/39391) in view of Murakami et al (5961432).

Isherwood et al disclose a paper comprising an elongate element partially disposed within the thickness of the paper sheet but exposed at one or more spaced locations on one or both sides of the sheet (Abs). The edges of the element are securely embedded within the paper. The elongate element can partially or wholly metallized and can contain indicia, images or information, holographic images, colorshift areas, security embossings, a liquid crystal material and/or be printed on one or both sides (p 6, lines 22-29). The paper can be a non-security paper or a security paper, such as a banknote, cheque, travelers cheque, identity card, passport or bond (p 4, lines 14-18; p 17, lines 3-7). Isherwood et al discloses a method of making the paper comprising steps of providing blinded (drainage restriction) areas on a porous support surface, depositing fibers on the support around the blinded areas, bringing the elongate strip into contact with the blinded areas, then depositing a further layer of fibers over the first layer to embed the element within the paper. Where the blinded areas occur, a window is formed on one or both sides of the element to expose the element (p 4, line 19 to p 5, line 5).

Isherwood et al does not disclose apertures exposing at least part of the elongate element wherein at least one edge of the element is exposed and a gap is formed between the element and the perimeter of the aperture. Isherwood also does not

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disclose a plurality of sheets in which each sheet comprises an aperture in an identical location. Isherwood does disclose that a second sheet can be laminated to the first such that the elongate element is exposed at only one surface of the laminated sheet.

Murakami et al disclose a laminated security paper comprising an embedded elongate element (thread) that is exposed at window portions (Abs). The window portions form apertures through a first layer of the paper. The thread (col 5, lines 26-28; Fig 1, reference # 5) is entirely exposed (both edges) at the windows (col 5, lines 26-28; Fig 1, reference #1) with a gap formed between the edge of the thread and the perimeter of the window, creating a second anti-falsification feature. A second layer is laminated to the first to embed the thread and carry watermarks of letters or pictures visible in the windows of the first layer. Murakami et al teaches that anti-falsification effectiveness increases with the number of anti-falsification means used (col 2, lines 3-5).

The art of Isherwood et al, Murakami et al and the instant invention are analogous as pertaining to paper having an embedded security element. It would have been obvious to a person skilled in the art at the time if the invention to create windows larger than the width of the elongate element and fully expose the element within the windows, thereby creating a gap between the element and the window perimeter, in the paper of Isherwood et al in view of Murakami et al to provide an area where additional anti-falsification features can be used. It would also have been obvious to include the windows at the same location on each sheet of multiple sheet documents such as

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ticketbooks or checkbooks to simplify their manufacture. Additionally, it would have been obvious to make apertures in multiple sheet documents at the same location on each sheet to facilitate binding of the sheets together into a book or booklet.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isherwood et al in view of Murakami et al and further in view of Merry (5127677).

Isherwood et al and Murakami et al do not disclose a multiple sheet document having apertures in each sheet offset from the apertures in adjacent sheets.

Merry discloses a means for securing sequential pages in a book, such as a passport, comprising marking the pages at the edges opposite the bound edge with a marking pattern that forms a visual image that is different for each page and that would be distorted if any pages of the book were missing (Abstract; col 1, lines 6-15). Merry discloses that visual inspection of the marked unbound edges of the pages would easily reveal if any pages had been removed.

The art of Isherwood et al, Murakami et al and Merry are analogous as pertaining to documents having security markings. It would have been obvious to a person skilled in the art at the time if the invention to create a multiple sheet security document with apertures in locations offset from one another in adjacent sheets with the paper of Isherwood et al in view of Murakami et al and further in view of Merry in order to detect removal of pages from the book by visual inspection. It would have also been obvious to create the apertures on the edge of each sheet to provide instant detection of missing pages.

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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure [Edwards (5093184), Burchard et al (5688587), Tooth et al (EP 0059056 A1), Ekelund (GB 2204532 A)]. They pertain to other security papers having embedded elongate elements and windows or apertures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Cordray whose telephone number is 571-272-8244. The examiner can normally be reached on M - F, 7:30 -4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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